Abstract of the Disclosure

The invention provides novel compounds that enhance dimerization of the subunits of HIV-1 reverse transcriptase having mutations associated with resistance to nonnucleoside reverse transcriptase inhibitors (NNRTIs). Such compounds inhibit HIV-1 reverse transcriptase activity and as such, inhibit HIV-1, in particular HIV-1 resistant to conventional NNRTIs. The invention provides a method of determining whether a compound enhances formation of a complex between a p66 and p51 subunit polypeptides of HIV-1 reverse transcriptase, in which the p66 subunit has at least one or more mutations associated with resistance of HIV-1 to at least one NNRTI. The invention further provides methods of using a compound that enhances formation of a complex between a p66 subunit polypeptide having at least one mutation associated with resistance of HIV-1 to at least one NNRTI and a p51 subunit of HIV-1 reverse transcriptase.